

**Remarks**

Claims 132-172 are presently pending in the subject application. Claims 142, 152, 162 and 172 are withdrawn from further consideration in view of the Examiner's restriction requirement set forth in an Office communication mailed on August 10, 2006. Claims 1-131 are canceled without prejudice to the prosecution of the subject matter of these claims in this or a future continuing application. Reconsideration and allowance are hereby respectfully requested.

Claims 132-172 are newly added herein. No new matter is being introduced by these claims.

Claim 132 is an independent probe claim that corresponds to a combination of prior claims 81, 82 and 90. Claims 133-142 depend, either directly or indirectly, from claim 132. Claims 133-137 correspond to prior claims 86, 83-85 and 87, respectively. Claim 138 corresponds to prior claims 88 and 89. And claims 139-142 correspond to prior claims 91-94, respectively.

Claim 143 is an independent probe claim that corresponds to a combination of prior claims 95, 96, 100 and 109. Claims 144-152 depend, either directly or indirectly, from claim 143. Claims 144-149 correspond to prior claims 100, 101, 97-99 and 106, respectively. Claim 150 corresponds to prior claims 107 and 108. And claims 151 and 152 correspond to claims 110 and 111, respectively.

Claim 153 is an independent probe claim that corresponds to a combination of prior claims 95, 96, 102 and 109. Claims 154-162 depend, either directly or indirectly, from claim 153. Claims 154-159 correspond to prior claims 102, 103, 97-99 and 106, respectively. Claim 160 corresponds to prior claims 107 and 108. And claims 161 and 162 correspond to claims 110 and 111, respectively.

Claim 163 is an independent probe claim that corresponds to a combination of prior claims 95, 96, 104 and 109. Claims 164-172 depend, either directly or indirectly, from claim 163. Claims 164-169 correspond to prior claims 104, 105, 97-99 and 106, respectively. Claim 170 corresponds to prior claims 107 and 108. And claims 171 and 172 correspond to claims 110 and 111, respectively.

The specification has been amended herein to change the title of the invention to more accurately reflect the nature of the claimed subject matter.

**Rejection Under 35 U.S.C. § 112, First Paragraph**

Claims 81, 85, 87-93, 95-99, 106-110, 112, 115-117, 120-123, 130 and 131 stand rejected by the Examiner under 35 U.S.C. § 112, first paragraph, on written description grounds. In particular, the Examiner contends that the specification does not support claims “comprising” or “having” a recited sequence in combination with a disclosed function (*i.e.*, binding to *T. vaginalis* but not to *T. tenax*). To the extent that the presently pending claims are directed to probes comprising one of the disclosed sequences, the claims specifically exclude probes having bases in addition to those of one of the disclosed sequences which participate in stable hybridization the targeted *Trichomonas vaginalis* nucleic acid under the indicated conditions. Moreover, the additional sequences contemplated by the claims do not go to the novelty of the invention, but rather reflect that the probes may have additional sequences for, by way of example, self-hybridization or immobilization on a solid support. *See, e.g.*, specification at paragraph bridging pages 6 and 7. Thus, Applicants submit that the presently pending claims satisfy the written description requirement and, accordingly, withdrawal of this rejection is hereby respectfully requested.

**Rejection Under 35 U.S.C. § 112, Second Paragraph**

Claims 81-93, 95-110 and 112-131 stand rejected by the Examiner under 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner’s rejection has two parts. In the first part the Examiner contends that Applicants have not recited particular stringent conditions, and in the second part the Examiner urges that providing particular stringency conditions in the claims does not address the affect of the wash conditions. The recitation of particular conditions in the independent claims obviates the first part of this rejection. With regard to the second part of this rejection, the claims clearly state the conditions under which the probes will form a stable hybrid with nucleic acid derived from *T. vaginalis* but not with *T. tenax* nucleic acid. Whether subsequent wash conditions

have a destabilizing effect is irrelevant to the definiteness determination, as Applicants' claim language is unambiguous. *See* MPEP § 2173.02 ("The Examiner's focus during examination of the claims for compliance with the requirement for definiteness of 35 U.S.C. 112, second paragraph, is whether the claim meets the threshold requirements of clarity and precision."). Notwithstanding, Applicants wish to note that a wash step is not employed in homogenous assays following hybridization of the probe to the target nucleic acid, such as the homogenous assays detailed in the examples section of the specification. *See also* the specification at page 48, line 1 *et seq.* Thus, Applicants submit that the presently pending claims are definite and, accordingly, withdrawal of this rejection is hereby respectfully requested.

#### **Rejection Under 35 U.S.C. § 102**

Claims 81, 90, 95 and 109 stand rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by Gunderson *et al.* (J. Eukaryot Microbiol. (1995) 42(4):411-415). Applicants submit that this rejection is rendered moot by the amendments to the claims herein. Accordingly, withdrawal of this rejection is hereby respectfully requested.

#### **Conclusion**

Applicants submit that the subject application is in condition for allowance and early notice to that effect is respectfully requested.

After-Final Amendment  
Date: November 20, 2007

Serial No. 10/848,922  
Atty. Docket No. GP142-02.UT

Please charge any fees due in connection with this Amendment, including the fee due for a two-month extension of time, to Deposit Account No. 07-0835 in the name of Gen-Probe Incorporated.

Respectfully submitted,

Date: November 20, 2007

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